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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,526	07/16/2003	Glen A. Morr	614359/82654	8986

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Barnes & Thornburg
600 One Summit Square
Fort Wayne, IN 46802

EXAMINER

LOPEZ, FRANK D

ART UNIT PAPER NUMBER

3745

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/620,526

Applicant(s)

MORR ET AL.

Examiner

F. Daniel Lopez

Art Unit

3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 13-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13-28 and 30-37 is/are rejected.
- 7) ☒ Claim(s) 29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/22/05
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

Response to Amendment

Applicant's arguments filed February 4, 2005, have been fully considered but they are not deemed to be persuasive.

Applicant's arguments with respect to claims and have been considered but are deemed to be moot in view of the new grounds of rejection. The new grounds of rejection was necessitated by the added limitation that "a seal located between the cap and the body" (claim 18 line 9-10), and amendments trying to overcome the 112 rejections.

Applicant argues that the set is a bearing, as discussed in the specification, and further argues that limiting the set to a spherical member is unduly limiting. The question becomes, how does a "bearing" further limit "set"? A bearing (i.e. a roller bearing or a ball bearing) is well known to be an element which supports one member relative to another member while allowing the relative movement between the two members. It appears that the set does not act as a bearing; therefore it is unclear how the limitation of a bearing is supposed to be interpreted. It was thought that the bearing was an indication of its shape. This claim must be rewritten, or explained, to show what limitation is meant by "bearing".

Applicant concludes that the amended claims are allowable over the cited prior art, but fails to discuss what elements make the claims allowable, and how these elements overcome the cited prior art. As discussed below, the examiner disagrees.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

Claims 1-11, 13-17, 21-23 and 25-27 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1 line 2-3 "a power supply; at least one piston movable in response to the power supply" is confusing grammatically. Suggest that this be replaced by --a supply of power; at least one piston movable in response to the supply of power--.

In claim 6 and 21 line 1-2 "a piston is attached to respective opposed portions of the cable" is wrong, since there are disclosed two pistons, a respective piston attached to each of opposed portions of the cable.

Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "bearing member" in claims 7, 22 and 23 is used by the claim to mean "spherical member", while the accepted meaning is "support member for a first element movable relative to a second member." The term is indefinite because the specification does not clearly redefine the term. Suggest that --spherical member-- replace "bearing member" in claims 7, 22 and 23 line 2 and in the specification.

If applicant does not mean a spherical member, it is unclear what a limitation is to be associated with "bearing member". Applicant needs to specify what limitation is meant by "bearing member" which is not a limitation of a "set".

Claims not specifically mentioned are indefinite, since they depend from one of the above claims.

Claim Rejections - 35 USC § 102

Claims 31-37 are rejected under 35 U.S.C. § 102(b) as being anticipated by Walters (see discussion below).

Claims 1, 3, 5, 9, 13, 14, 17 and 37 are rejected under 35 U.S.C. § 102(b) as being anticipated by Gajek et al. The piston (20) moves a flexible member (25), which moves a pinion (B, fig 3 or 4).

Claims 1, 3-14, 18, 19, 21-23, 25-27 and 30-37 are rejected under 35 U.S.C. § 102(b) as being anticipated by Akers. The piston (26) moves a flexible member (27), which moves a pinion (57), by way of a seal/fitting (65) fitting into a cavity of the pinion. A second piston (70) is attached to the other end of the flexible member.

Claims 1-5, 9, 13, 14, 18-20, 30 and 37 are rejected under 35 U.S.C. § 102(b) as being anticipated by Desmond. The piston (26) moves a flexible member (27), which moves a pinion (57), by way of a seal/fitting (65) fitting into a cavity of the pinion. A second piston (70) is attached to the other end of the flexible member.

Claim Rejections - 35 USC § 103

Claims 1-11, 13, 14 and 17 are rejected under 35 U.S.C. § 103 as being unpatentable over Walters in view of Gauthier. Walters discloses a rotary actuator comprising a longitudinally extending flexible member (one of lines 16) having a pair of opposed end, each end being attached to one of two pistons (e.g. 35, 38); a pinion (3, 5 or 7) fixed to the flexible member, wherein linear movement of the piston and flexible member causes rotational movement of the pinion; with a stop (e.g. guard shown in figure 9) engagable with the pinion to limit its movement; and with a seal (e.g. 50, fig 7; 112, fig 17c) between the piston and the pinion; but does not disclose that the flexible member is attached to the pinion by a fastener (set).

Gauthier teaches, for a rotary actuator comprising a longitudinally extending flexible member (10) fixed to a pinion (12), wherein linear movement of the piston and flexible member causes rotational movement of the pinion; that the flexible member is attached to the pinion by a fastener (38).

Since Walters does not show the details of how the flexible member is attached to the pinion and Gauthier does; it would have been obvious at the time the invention was made to one having ordinary skill in the art to attach the flexible member of Walters to the pinion by a fastener, as taught by Gauthier, as a matter of engineering expediency.

Claims 18-21 and 24-27 are rejected under 35 U.S.C. § 103 as being unpatentable over Walters in view of Desmond. Walters discloses a rotary actuator comprising a longitudinally extending flexible member (one of lines 16) having a pair of opposed end, each end being attached to one of two pistons (e.g. 35, 38), slidable in a cap (e.g. housing 20); a pinion (3, 5 or 7) fixed to the flexible member, wherein linear movement of the piston and flexible member causes rotational movement of the pinion; with a stop (e.g. guard shown in figure 9) engagable with the pinion to limit its movement; and a seal (e.g. 50, fig 7; 112, fig 17c) between the piston and the pinion; but does not disclose that the seal is between the cap and a body.

Desmond teaches, for a rotary actuator comprising a longitudinally extending flexible member (30) fixed to a pinion (23), wherein linear movement of a piston (29) in a cap (28) and flexible member causes rotational movement of the pinion; and a seal (35) between the piston and the pinion; that the seal is between the cap and a body (33).

Since the seals of Walters and Desmond are functionally equivalent in the rotary actuator art; it would have been obvious at the time the invention was made to one having ordinary skill in the art to locate the seal of Walters between the cap and a body, as taught by Desmond, as a matter of engineering expediency.

Conclusion

Claim 29 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 15 and 16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. § 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

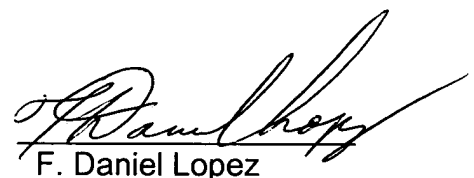
Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 3745

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is (571)-272-4821. The examiner can normally be reached on Monday-Thursday from 6:15 AM -3:45 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on 571-272-4820. The fax number for this group is (703) 872-9306. Any inquiry of a general nature should be directed to the Help Desk, whose telephone number is 1-800-PTO-9199.

A handwritten signature in black ink, appearing to read 'F. Daniel Lopez', with a long, sweeping horizontal line extending to the right.

F. Daniel Lopez
Primary Examiner
Art Unit 3745
May 02, 2005